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PATENT APPLICATION OF
EARL CULLY
FOR: POND CYPRESS [TREE] NAMED 'MORRIS'

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The [present] new invention comprises a new and distinct cultivar of pond cypress, botanically known as *Taxodium ascendens*, and referred to by the cultivar name 'Morris' [(Figure 1)]. The initially discovered tree is growing in a cultivated area on the home grounds of inventor Earl Cully, 846 Hoagland Road, Jacksonville, Illinois, in Morgan County, in Township 14, Range 10.

The new cultivar 'Morris' is the result of a small stick of scion wood given to [me in the mid-1960s.] the inventor by the late [J.] Joseph C. McDaniel in the mid 1960's. [had taken the scion] The scion was taken from a pond cypress [growing] at the Morris Arboretum[, located in Philadelphia, Pennsylvania. He took this scion] with the permission of Dr. John Fogg, [a friend of his,] who was [at that time] then [D] director of the [Morris] Arboretum. [(Both of these men are now deceased.)) [J.C. McDaniel gave the inventor this scion, which was grafted onto a young bald cypress seedling at the inventor's nursery. [I grafted this scion onto a young bald cypress seedling.] The graft [grew] took, and grew [developing] into a [beautiful] tree, developing [with a single leader and] a medium-oval crown. [After] On seeing how well this tree developed, [I propagated more, and began taking a critical look at this tree.] it was further propagated and evaluated by the inventor. After evaluating this pond cypress for nearly thirty-eight years, the inventor came to the firm conclusion that this tree was worthy of cultivar status. [I have been looking at] After evaluating seedling populations of *Taxodium ascendens* for [nearly] the past forty years, [and this pond cypress was among the best I had ever] the tree now known as the 'Morris' cultivar displays better form, hardiness, and foliage color than any pond cypress the inventor has observed, [-] including the 'Prairie Sentinel' [Pond Cypress], which [I] the inventor introduced under patent [in] No. 3,548 issued May 14, 1974. As the years passed, the original tree at the Morris Arboretum has deteriorated to the point to where it is no longer a viable tree; therefore, this patent application is prepared for the first cloned tree grown from the original tree at the Morris Arboretum.

[The 'Morris' pond cypress cultivar is very hardy. It has withstood temperatures of -28°F with little or no damage.]

The 'Morris' cultivar [grows with a straight central leader, develops a] is

medium-oval [crown] in form with a straight, central leader, [and has] displaying fine thread-like leaves containing short, thin scales or needles (Fig. 1) [that display a beautiful coppery-bronze autumn color]. The male flowers are composed of a 3.0-10.0cm panicle of purple cones in late April (Fig.2). The female ovules tend to cluster on tips of the proceeding year's growth. If fertilized, they develop into a subglobulose cone approximately 2.2cm in diameter that turns from green to brown-gray at maturity (Fig.3). In autumn, the foliage changes from green to a copper-bronze (RHS colour chart; 165B and C) (Fig.4). A fibrous bark with irregularly, furrowed ridges covers the trunk (Fig. 5). [The tree] The cultivar has never suffered damage from high winds [and has never broken from] or ice in the thirty-plus years that it has been under evaluation. The 'Morris' cultivar is very hardy. It has withstood minus twenty-eight degrees Fahrenheit at the U.S.D.A. zone 5b in which it is growing.

The following characteristics [in combination] distinguish the new cultivar named 'Morris' from other cultivars of *Taxodium ascendens*. To the knowledge of this inventor, there is only one other introduced cultivar of pond cypress[:], [T]he 'Prairie Sentinel', which [I] Earl Cully introduced in [1973] 1974. The 'Morris' cultivar is medium-oval in form, [vigorous in growth, with medium-green foliage.] but the 'Prairie Sentinel' is narrow pyramidal in form with a limb spread of only ten feet. *T. ascendens* 'Morris' has a limb spread of twenty-three feet. [It is hardy as far north as Peoria, Illinois.] The 'Morris' cultivar is much harder than the 'Prairie Sentinel'. The 'Prairie Sentinel' pond cypress [is very narrow in form, with only a ten foot limb spread, grows more slowly, and is not hardy north of Interstate 72. In bad winters during the 1970s, many of the 'Prairie Sentinel' cypress were winter killed.] has sustained winter damage as well as mortality on several occasions at plantings in the northern portion of the U.S.D.A. zone 5b. The 'Morris' has never exhibited any damage from winter cold from U.S.D.A. zone 5b plantings. This new cultivar grows more rapidly and has darker, green foliage than the 'Prairie Sentinel'.

PROPAGATION

Asexual propagation is done by bud grafting (chip budding) onto one-year-old *Taxodium distichum* seedlings. This method of propagation has [yielded] given a 95-98%

bud stand. Propagation is being [done at Heritage Trees, Inc. near Jacksonville, Illinois, and at one wholesale nursery] performed on the property of the inventor and two wholesale nurseries, one in Oregon and the other in Oklahoma. Asexual propagation by this method has proven to be very consistent and effective. Asexual reproduction by grafting has shown that the unique features of the new pond cypress 'Morris' is stable and reproduced true to type in successive generations (Fig.6).

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to the Royal Horticultural Society Colour Chart. [The taxonomic description has been prepared by Thomas L. Green, Ph. D., Urban Forestry Professor, Western Illinois University, Macomb, Illinois 61455.]

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying colored photographs illustrate the appearance and color of the new pond cypress tree, showing the colors as accurately as [is reasonably] can [possible] possibly [to] be [obtain] obtained in colored reproductions of this type. Actual foliage colors may differ slightly due to light reflection.

Figure 1 [-] depicts the initially discovered tree named 'Morris' in summer foliage.

Figure 2 [-] depicts the awl-like foliage and the male catkins as they appear in spring.

Figure 3 [-] depicts the round seed cone as it appears in autumn.

Figure 4 [-] depicts the tree in autumn color.

Figure 5 [-] depicts the tree in very early spring before foliage emerges.

Figure 6 depicts the form of the asexually propagated 'Morris' cultivar.

THE PLANT

FORM: Tree

5 SHAPE: Excurrent, pyramidal

HEIGHT: 13.1m (40[']ft)

10 SPREAD: 7.5m (23[']ft)

AGE: 38 years

15 BARK: Trunk base flared; reddish brown (197A, 197B & 197C, with a slight tinge of 174A); long longitudinal fibrous or scaly ridges deeply and irregularly furrowed, slightly peeling.

BRANCHES:

20 Angle of attachment: Ranges from 30° to 45°

Spacing: Regular

Color: Branch color changes with size

Size: >1cm (1/2['] in) diameter (new growth)

Bark: Hairless, tan (197B & 197C)

Size: <1cm (1/2['] in) diameter

25 Bark: Hairless, gray (199B, 197B & 197C)

Branch length: 2.4-3.0m (8-10ft)

Branch diameter: 2.54-20.3cm (1-8in)

LEAVES:

30 Scale Length: 0.4-0.9cm, μ =0.7cm

Scale Width: 0.1cm, μ =0.1cm

Leaf Length: 2.3-12.0cm, μ =8.9cm

Leaf Width: [about 1mm] 0.1cm

35 Form: long, slender, flexible with numerous [short, thin, flexible scales] narrowly lanceolate (subulate) scales that are appressed.

Texture: fine

Quantity: abundant

Color: green (139B, 139C, & 143B)

40 [Thorns: none]

[Spines: none]

[Prickles: none]

45 Buds: (vegetative) tiny, <1mm, slightly sunken, (175A and 175B)

Flowers: male: terminal. Droop in branched spikose

panicle 3.0-10.0cm (μ =6.8cm) long.
female: clustered mostly terminal ovulate cones green
(137A and 137B)

5 Fruit: sessile or nearly sessile, [globose] subglobose 1.6-2.5cm
(μ =2.2cm) diameter, grooved with fan-shaped
and rhomboid scales; green (137A) ripening to brown
10 (165B and 165C).

15 HAS THIS PLANT EVER BEEN OFFERED FOR SALE?
Yes. It was offered [for sale by Heritage Seedlings, Inc.]
for spring 200[3]4 delivery[.] by a wholesale nursery in Oregon.

20 [NAME THE VARIETY THIS NEW PLANT MOST RESEMBLES:]
[None that the inventor is aware of.]

25 [COMPARE THIS NEW VARIETY WITH OTHERS OF THE
SAME SPECIES AND WITH ITS PARENT OR PARENTS;
STATE THE DISTINGUISHING CHARACTERISTICS OF THE
NEW VARIETY AND ITS ADVANTAGES.]

The 'Morris' cultivar is much hardier than the species. It [is] appears to be
30 a more vigorous grower. [In] It has demonstrated during thirty-plus years
of [testing] evaluation[, it has not suffered any] and testing a greater
resistance to breakage from wind [or] and ice. In the [inventor's] opinion
of the inventor, [it has a more pleasing autumn color than] fall color is
superior to the species. [The 'Morris' cultivar has unlimited use for street
35 and lawn planting throughout a large portion of the United States as well
as other parts of the world.]

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[INVENTOR'S FULL NAME:]

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[INTEREST ASSIGNED TO:]

[Heritage Trees, Inc.]

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It is claimed:

A new and distinct cultivar of pond cypress *Taxodium ascendens*, named

'Morris', as illustrated and described.

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